**Transformer Parameters**

<table>
<thead>
<tr>
<th>Core</th>
<th>Power</th>
<th>Weight</th>
<th>Dielectric Isolation</th>
<th>Voltage</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERS1</td>
<td>6.5kW</td>
<td>220G</td>
<td>4kV</td>
<td>1000V</td>
<td>200A</td>
</tr>
</tbody>
</table>

**Topologies**
- Full Bridge
- Half Bridge
- Boost
- Resonant
- Push Pull
- Buck

**Inductor Application**

**Transformer Technical Information**

- **Isolation Voltage:**
  - Primary - Secondary: 4kVrms
  - Primary - Core: 2.5kVrms
  - Secondary - Core: 2.5kVrms
- **Switching Frequencies:**
  - 20kHz-3MHz

**Transformer Specification Example**

- **Total Output Power:** 1.8kW
- **Topology:** Full Bridge
- **PSU Output DC Voltage & Current:** 225Vdc @ 8A (max)
- **Primary Inductance:** 3.8mH ± 25% (provisional)
- **Primary Winding Current:** 4.7A rms
- **Secondary Winding Current:** 7.7A rms
- **Switching Frequency:** 80kHz
- **Minimum Bus Voltage:** 390V
- **Maximum Bus Voltage:**
- **Turns Ratio:** Primary to Secondary 17:11
- **Cooling:** Heatsink + Air
- **Ambient Temperature:** 70°C Max
- **Insulation Test Voltage:**
  - Primary to Secondary: 4000Vrms
  - Primary to Core: 2500Vrms
  - Secondary to Core: 2500Vrms
- **Standard:** EN60950